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ABSTRACT

This report describes the opinions of a number of groups on five roles attributed to vocational education (i.e., employability skills development, occupational skills development, work experience, job placement, and basic skills development). The findings were based on a secondary analysis of data from five completed National Center for Research in Vocational Education studies. The secondary analysis involved an examination of the opinions of students, school personnel, community representatives, and policymakers. Some of the findings included the following: (1) occupational skills development, work experience, and basic skills development are important for all students; (2) although employability skills development is important for all students, it is considered more important at the secondary level; and (3) training-related placement is not seen as the most important role for either secondary or postsecondary vocational education. On the basis of the study findings, it is suggested that Congress should re-examine the importance given to training-related placement as a basis for assessing program success, re-examine the need to continue legislative set-asides, decide if state and local agencies should determine the allocation of federal vocational education funds, and examine the federal role in promoting basic skills development. The United States Department of Education should provide more adequate public opinion data and formulate national priorities for the use of federal funds for vocational education improvements; meanwhile, state boards should continue research and cooperation with other agencies and levels of government to improve vocational education. (KC)

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OPINIONS ABOUT THE ROLES OF SECONDARY AND POSTSECONDARY VOCATIONAL EDUCATION

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FOREWORD

Opinions about the Roles of Secondary and Postsecondary Vocational Education is the last in a series of four information papers initiated in 1982 that address issues deemed relevant for policy development in vocational education. This report describes opinions about roles of secondary and postsecondary vocational education that were expressed by groups of present and former students, school personnel, employers, members of vocational education advisory commttess, school board members, and state legislators. In formulating this report, it was assumed that the opinions of these groups will have an important use to policymakers, vocational education administrators, and others who have a part to play in the formulation, modification, and acceptance of new vocational education policies.

The National Center is indebted to Harold Starr and Morgan Lewis, Senior Research Specialists; Jeannette Fraser and Jill Russell, Program Associates; and Mollie Orth, Graduate Research Associate, for their efforts in the preparation of this document. These individuals work in the Evaluation and Policy Division of the National Center. Harold Starr was responsible for directing the completion of the report and Morgan Lewis served as project director.

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Robert E. Taylor
Executive Director
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in Vocational Education

EXECUTIVE SUMMARY

An assessment of opinions about the roles of secondary and postsecondary vocational education from various groups that comprise the public at large is currently needed because of the increased competition for federal, state, and local funds. Funding, planning, and policy decisions about vocational education require an understanding of the vocational education roles that the public at large desires to support.

This report describes the opinions of a number of groups on five roles attributed to vocational education in preparing persons for employment. These five roles are (1) employability skills development, (2) occupational skills development, (3) the provision of work experience, (4) placement of program completers in jobs, and (5) basic skills development.

The findings that are contained in this report were based on a secondary analysis of data found in five completed National Center studies. The secondary analysis process included both descriptive and statistical analyses, and involved an examination of the opinions of present and former students; teachers, counselors, and school administrators; employers; local vocational education advisory council members; school board members; and state legislators. The different groups were combined for analytical purposes into four publics: (1) students, (2) school personnel, (3) community representatives, and (4) policymakers.

The secondary analyses of the five completed National Center studies produced a number of findings that are summarized in the following.

- Employability skills development is important for all students, but is a more important process at the secondary level than it is at the postsecondary level.
- Occupational skills development is an important role for both secondary and postsecondary vocational education.
- The provision of work experience is considered important for both secondary and postsecondary vocational education.
- Training-related placement is not seen as the most important role for either secondary or postsecondary vocational education. However, it is considered to be more important at the postsecondary level.

- Basic skills development is an important role at both secondary and postsecondary levels. However, it is considered to be more important at the secondary level.

On the basis of the study findings (and the limitations inherent in the composite data base from which the findings were generated), it is suggested that Congress should consider the following:

- Re-examining the importance given to training-related placement in the Education Amendments of 1976 as a basis for assessing the success of vocational education programs. Study findings indicate that the public at large values other roles for vocational education higher than they value training-related placement.

- Re-examining the need to continue legislative set-asides and deciding if states and local agencies should determine the allocation of federal vocational education funds among providers. The public at large believes that secondary and postsecondary vocational education have similar roles in preparing persons for employment. In addition, decisions about where to fund vocational education (both geographically and by level) depend on student interest in obtaining training, local employment needs, and the availability of facilities and instructional programs.

- Examining what the federal role should be in promoting basic skills development. The public at large believes that basic skills development is both an appropriate role for vocational education institutions and a need for vocational education students. The federal government has a vested interest in ensuring that the nation has a highly trained and skilled work force. Such a work force cannot exist unless appropriate attention is given to basic skills development in educational institutions. Such an examination by the Congress should focus on what the national policy toward basic skills education should be, and how federal legislation can influence implementation of the policy by states and local education providers.

The U.S. Department of Education should consider the following:

- Responding to the need for more adequate data to gauge public sentiment about roles of secondary and postsecondary education by funding additional research studies.

- Formulating national priorities for the use of federal funds for vocational education improvements in the states. The public at large supports implementing occupational, employability, and basic skills training that is of high quality; developing work experience programs; and encouraging job placement programs at the local level. Since federal funds for improving vocational education are not unlimited and program improvements are likely to differ with respect to their costs and their impacts, priorities for funding program improvements are important.

State boards and agencies for vocational education should consider:

- Conducting research to determine what roles for secondary and postsecondary vocational education are supported by the public at large, and formulating statewide priorities for the use of federal and state funds for vocational education improvements on the basis of such research. Such priorities should consider federal program improvement priorities and the needs of local providers within the state.

- Working with other state educational boards and agencies to formulate policies and plans that will ensure that vocational education students will have the basic educational skills they need to function as effective workers in an increasingly technological labor market and to be able to make career changes and when necessary or desired. The findings of this study shed no light on who should be responsible for providing basic educational skills and at what levels.

CHAPTER I

INTRODUCTION

Problem

Since 1963, the very history of vocational education and federal vocational education legislation suggest that vocational education has taken four educational roles upon itself in preparing students for employment. These four educational roles are (1) occupational skills development, (2) employability skills development, (3) the provision of work experiences, and (4) the responsibility for placing students in training-related jobs. A fifth role for vocational education, basic skills development, has emerged more recently--partly in response to a national concern about actual and potential shortages of skilled industrially oriented craftsworkers and technicians in the 1980s and beyond (Starr 1980). The term basic skills in this context refers to communication skills (speaking and writing), reading skills, and computational skills.

Vocational education is provided by local secondary and postsecondary facilities, and it is not uncommon to find many differences of opinion among secondary and postsecondary vocational educators on the emphases that these five educational roles for vocational education should receive. In many states, secondary and postsecondary facilities are governed by separate boards for vocational education. Here too, there are differences of opinion about the appropriate educational roles for secondary and postsecondary vocational education. Indeed, these differences of opinions have, at times, adversely impacted on the planning and coordination of vocational education programs and services in some states by local secondary and postsecondary providers (Starr et al. 1980).

Although vocational education is funded mainly by states and local communities, it operates as a federal, state, and local partnership. The federal government contributes much less than do states and local communities, but federal funding does strongly influence the planning and policies of state and local secondary and postsecondary vocational education (Starr et al. 1981). Individuals elected to federal and state legislative bodies, members of local school boards, and vocational education administrators at state and local levels make vocational education funding, planning, and policymaking decisions partly on the basis of what they assess to be the opinions of the public at large about what roles vocational education should be performing and what should be accomplished with regard to preparing students for jobs.

Differences of opinion about the roles of secondary and postsecondary vocational education and their effects on the delivery of vocational education have, in the past, been largely an internal vocational education concern. This is no longer true.

In addition to competing for available public funds, vocational education must also accommodate itself to changing economic and labor market conditions. There is currently a high level of unemployment, and relatively high levels of unemployment are anticipated for some time to come. More than ever before, employers need workers who can adapt to new and changing technologies. Even many highly skilled workers find it necessary to learn new occupational skills because of the closing and/or relocation of existing firms. These conditions must certainly affect what educational roles the public at large will be willing to support with regard to vocational education.

For example, training-related placement activities have always been accepted by vocational educators. More recently, this role was given high visibility and importance in the Education Amendments of 1976. Indeed, training-related placement was legislated as the "bottom line" for assessing the short-range effectiveness of the use of federal funds for vocational education. Is the public at large willing to continue to support the role of training-related placement as the major criteria for assessing the effectiveness of vocational education? Or, is the public more willing to support other roles for assessing the effectiveness of vocational education (e.g., occupational skills development or employability skills development)?

In the past few years, basic skills development has received much attention by the public as a role for both general and vocational education. But assuming that choices and priorities among roles have to be made in a time of limited educational funds, is the public willing to invest more heavily in the long-term payoffs resulting from a better educated labor force (e.g., improved computational and communication skills) than the short-range payoff of improving the occupational skills development of students so that they are more able to compete for currently available jobs?

Today, more than ever before, an assessment of the opinions of the public at large is needed by legislators, policymakers, and planners because of the increased competition for funds at the federal, state, and local levels. Funding and policy questions can be more adequately addressed when there is a better understanding of the opinions of the public at large about the roles of secondary and postsecondary vocational education. Here are two examples of these kinds of questions:

- Should the public fund a very broad range of vocational education roles (resulting in fewer dollars being available to support activities within any given role), or should it reserve its limited resources for a restricted number of roles that are most likely to produce a set of predefined vocational education outcomes?

- Which roles should reserve priority in secondary and postsecondary vocational education program planning and in federal, state, and local funding decisions if the public expects vocational education to: (1) prepare students to be more technological-oriented and skilled, (2) retrain dislocated workers for new jobs, (3) reduce the incidence of youth unemployment, or (4) to simultaneously address two or more of these (and similar) purposes for vocational education?

Approach

Up-to-date, direct evidence is lacking about the extent to which the public at large is willing to support either the five vocational education roles discussed previously or other potential roles. Therefore, a substitute approach to the problem had to be taken. This substitute approach was to use a secondary analysis process calling for the use of available data that were not generated for the purposes of the present report, but that nonetheless had relevance.

Data bases developed from five research studies conducted since 1980 by the National Center served as the information sources for the present report.* These previous National Center studies are (1) Factors Relating to the Job Placement of Former Postsecondary Vocational-Technical Education Students (McKinney et al. 1982), (2) Attitudes toward Vocational Education and the Relationship between Family Income and Participation in Vocational Courses (Lewis, McElwain, and Fornash 1980), (3) A Survey of the National Association of Manufacturers (Nunez and Russell

*This report is one of four policy-oriented projects funded this year as part of the Information for Planning and Policy Development function under the National Center for Research in Vocational Education contract with the U.S. Department of Education. The terms of this contract state that for this function "new data generally should not be generated for the various analyses." It was therefore necessary to use completed studies that contained data pertinent to the present study.

1982), (4) A Survey of the National Conference of State Legislatures (Nunez and Russell 1982), and (5) Factors Relating to the Job Placement of Former Secondary Vocational Education Students (McKinney et al. 1981). A description of each of these five studies is found in Appendix A.

A secondary analysis process was used to examine the opinions of different groups about the roles of secondary and postsecondary vocational education. The secondary analysis process consisted of two steps:

- Synthesizing the results of the five National Center studies to produce a descriptive analysis
- Performing a secondary statistical analysis of the data bases in order to assess similarities of opinions by various groups on vocational education roles

Information derived from the descriptive and statistical analyses comprising the secondary analysis process was then examined for its legislative, planning, and policy-related implications for vocational education.

Limitations of the Study

As noted previously, the findings in this report are based on analyses of responses to questions found in data bases that were generated for purposes different from those for which the present report was prepared. Perhaps even more importantly, these data bases did not contain information on other possible roles for vocational education, on whether or not these other roles would be more or less desirable, or on opinions based on different funding or employment context scenarios. Finally, it should be noted that not all groups responded to the same questions and that some groups responded to a unique question. Thus comparisons of opinions on the roles of secondary and postsecondary vocational education among all the groups were not always possible.

It is recognized that the secondary analysis process undertaken to prepare this report is not as desirable as a targeted research effort to achieve an understanding of the opinions of the public at large on the roles of secondary and postsecondary vocational education. However, under the constraints of not being able to generate a new empirical data base, secondary analysis of existing data bases was the best cost-effective substitute available. Implications for policy and planning were formulated from the findings of the secondary analysis process with this caveat in mind. The implications for policy and

planning that were formulated were, of necessity, limited in number but are considered to be reasonable, given the study's limitations.

Audiences

The primary audiences for which this report has been prepared include national and state policymakers, state and local vocational education administrators, and persons in special interest groups that have a part to play in the formulation or revision of future vocational education policy. What this report tries to convey to these persons is an understanding of certain realities that should be considered as vocational education policies are being debated and formulated.

CHAPTER II

RESULTS

Descriptive Analysis

The descriptive analysis was carried out in two ways. First, the survey instruments in the five National Center studies included in the secondary analysis process were searched for questions that were considered relevant. They were considered relevant if they addressed one or more of the roles of vocational education being considered in this report; namely, basic skills development, employability skills development, occupational skills development, provision of work experience opportunities, and responsibility for job placement.

The search of the survey instruments produced a set of nineteen questions. Each of the nineteen questions is presented in this report, grouped in accordance with the particular vocational education role to which it is related. The publics who responded to the question are itemized for each question. This is followed by narrative statements of survey results obtained within and across responding groups.

It should be noted that each of the questions presented represents an example of the question contained in the various surveys. In some instances, the wording of questions was observed to have been changed slightly in the original studies to particularize questions to different respondent groups.

The responses of the different groups to the nineteen questions were then organized in an second way. The groups were combined to create four publics: current and former students (representing a student public); teachers, counselors, and administrators (representing a school personnel public); employers and advisory council members (representing a community representatives public); and school board members and state legislators (representing a policymakers public). A modal response was assigned to each question for each of the publics responding to the question. A set of summary tables was then prepared and formatted in a way that permits comparison of modal responses of the publics by question and by role.

Analysis of Responses by Role and Question

For purposes of data source identification, the following conventions will be used in lieu of the formal names of the five National Center studies: (1) "Factors--Postsecondary" for Factors Relating to the Job Placement of Former Postsecondary

Vocational-Technical Education Students, (2) "NSBA" for Attitudes toward Vocational Education and the Relationship between Family Income and Participation in Vocational Courses, (3) "NAM" for A Survey of the National Association of Manufacturers, (4) "NCSL" for A Survey of the National Conference of State Legislators, and (5) "Factors--Secondary" for Factors Relating to the Job Placement of Former Secondary Vocational Education Students.

Basic Skill Development

Four questions that relate to the importance of basic skills instruction for vocational education students were asked of respondents in the data bases used in this study. These questions are presented next, followed by respondent publics, data source identification, and findings. The same format is used in the descriptive analysis of the remaining four roles for vocational education.

Question 1:

> Of what help is the following factor for your high school vocational education studentd in obtaining jobs?
>
> Basic educational skills, such as writing, reading, and mathematics:
>
> ___ Very much help
>
> ___ Much help
>
> ___ Some help
>
> ___ Little help
>
> ___ Very little help

Respondent Publics:	Data Sources:
Students	Factors--Secondary Factors--Postsecondary
School personnel	Factors--Secondary Factors--Postsecondary
Community representatives	Factors--Secondary Factors--Postsecondary

Findings:

- Nearly three-fourths of all respondents indicated that basic skills are of much or very much help to students in obtaining jobs (table A.1).
- The distribution of responses from students in post-secondary schools implied that students at the post-secondary level do not consider basic skills as being as helpful to them as do students at the secondary level.
- Seven out of every ten secondary students indicated that basic skills are very much help to them in securing a job as compared to only four out of every ten postsecondary students.
- Disregarding the differences in magnitude, students, school personell and community representatives believed that basic skills are helpful to students in obtaining jobs.

Question 2:

[NOTE: In the question previous to this one in the NAM study, respondents were asked to evaluate vocational education by assigning it a grade of A,B,C,D, or Fail.]

If you assigned a grade below A (to either high school or community/junior college vocational education), what are the most important things high school or community/junior college vocational education has to do to improve its grade? (Check three in each column.)

	High School	Community/Junior Colleges
Increase the number of different kinds of vocational programs	_____	_____
Update vocational programs	_____	_____
Improve opportunities for minorities	_____	_____
Ensure that individuals who do not go on to college have access to vocational education	_____	_____

Provide work experience for vocational students	_____	_____
Actively support economic development in the community	_____	_____
Improve placement efforts	_____	_____
Stress teaching of basic skills (reading, writing, and arithmetic)	_____	_____
Involve employers more in vocational programming	_____	_____
Increase collaborative retraining efforts	_____	_____

Respondent Public:	Data Source:
Community representatives	NAM

Findings:

- Of ten possible activities, the need to stress teaching of basic skills was selected by three of every five manufacturers for the secondary level and two of every five manufacturers for the postsecondary level (table A.2).

- Of the ten possible improvements, basic skills development was the most frequently selected improvement needed at the secondary level and the second most frequently needed improvement at the postsecondary level.

Question 3:	Question 4:
Vocational education may produce many positive outcomes. Indicate to what extent vocational education in your state produces the listed outcome:	Efforts could be increased in different areas within vocational education. What would you recommend?
Improves basic skills (reading, writing, arithmetic).	Developing students' basic skills (reading, writing, arithmetic).

____ Great extent	____ Increase effort
____ Moderate extent	____ Maintain current effort
____ Small extent	____ Decrease effort
____ Not at all	____ No opinion
Respondent Public:	Data Source:
State Legislators	NCSL

Findings:

- Nearly ninety percent of the state legislators indicated that vocational education improves basic skills to a small or moderate extent (table A.3).
- Two-thirds of the state legislators stated that vocational education should increase its level of effort in basic skills instruction (table A.4).

Table 1 summarizes the findings about basic skills for each level and by publics.

Employability Skills Development

Five questions addressing the issue of employability skills development were asked of respondents in the data bases used in this study.

Question 1:

Of what help are the following factors for your high school vocational students in obtaining jobs?

Positive work attitudes	Human relations skills
____ Very much help	____ Very much help
____ Much help	____ Much help
____ Some help	____ Some help
____ Little help	____ Little help
____ Very little help	____ Very little help

SUMMARY TABLE 1

BASIC SKILLS FINDINGS FOR EACH LEVEL AND BY PUBLICS

BASIC SKILLS ISSUES BY LEVEL	Publics: Students	School Personnel	Community Representatives	Policymakers
Benefit of basic skills in helping students obtain employment [Table A.1]				
Secondary	Considered very beneficial	Considered beneficial	Considered beneficial	***[a]
Postsecondary	Considered beneficial	Considered beneficial	Considered beneficial	***
Stressing of basic skills as a means of improving vocational education [Table A.2]				
Secondary	***	***	Stress basic skills	***
Postsecondary	***	***	Not chosen by majority	***

[a]Data not available for this public on this particular issue.

SUMMARY TABLE 1--Continued

BASIC SKILLS ISSUES BY LEVEL	Publics: Students	Publics: School Personnel	Publics: Community Representatives	Policymakers
Extent to which vocational education improves basic skills [Table A.3]				
Level not specified	***	***	***	Moderate-small extent
Recommendations for changing programs to develop students' basic skills [Table A.4]				
Level not specified	***	***	***	Increase effort

Respondent Publics:	Data Sources:
Students	Factors--Secondary Factors--Postsecondary
School personnel	Factors--Secondary Factors--Postsecondary
Community representatives	Factors--Secondary Factors--Postsecondary

Findings:

- Over half of the individuals from the respondent publics indicated that positive work attitudes are believed to be much or very much help to students in getting jobs (table B.1).
- Over two-fifths of the respondents considered human relations skills to be much or very much help to students in getting jobs (table B.2).
- For students and community representatives, there is a general tendency for a higher percentage of these persons to indicate that these attributes would be very much help to the student in the secondary level rather than postsecondary level.
- School personnel are equally supportive of the benefits of a positive work attitude at both levels, and indicate a higher level of benefit from acquiring human relations skills at the postsecondary level.

Question 2:

Please rank the following goals of secondary vocational education programs as to how important you consider each to be. Rank the most important goal as "1", the next most important "2", the next most important "3", the next most important "4", and the least important "5". (Place the number in the blank to the left of the goal.)

____ a. To place students as they leave school in a job related to their training

____ b. To provide the students with competencies needed to obtain a job

____ c. To place students as they leave school in a job not necessarily related to their training

____ d. To create an awareness of the various jobs for which one might prepare

____ e. To provide an opportunity for students to explore various occupational areas

Respondent Publics:	Data Sources:
School personnel	Factors--Secondary Factors--Postsecondary
Community representatives	Factors--Secondary Factors--Postsecondary

Findings:

- While career awareness and career exploration were generally supported as goals for vocational education by these publics, they were not considered the most important goals (tables B.3 and B.4).
- For both publics, there is a strong tendency for the goal of employability skills development to be ranked higher at the secondary level than at the postsecondary level.

Question 3:

How should high schools prepare youth for work?

____ Teach both employability skills and specific occupational skills in high school

____ Teach employability skills in high school

____ Teach specific occupational skills in high school

Definitions-Employability skills: Skills in such areas as career decision making; seeking, finding, and holding a job; resume writing and interviewing; attendance; punctuality; and work attitude. Occupational skills: Technical and manual skills such as typing and machine shop work.

Respondent Public:

Community representatives

Data Source:

NAM

Findings:

- Three-fourths of the manufacturers surveyed indicated that both employability and specific occupational skills need to be taught at the secondary level (table B.5).
- Of the one-fourth of the manufacturers who selected either employability skills development only or teaching specific occupational skills only, twice as many favored the goal of employability skills development over the goal of teaching specific occupational skills.

Question 4:

Several changes are under consideration in vocational education. For the following proposed change; indicate whether you agree, disagree, or are undecided.

Increase employability skills training at the high school level?

____ Agree

____ Disagree

____ Undecided

Respondent Public:

Community representatives

Data Source: NAM

Question 5:

Effort could be increased in different areas within vocational education. What would you recommend?

Teaching at the secondary level how to get and hold a job

____ Increase effort

____ Maintain current effort

____ Decrease effort

____ No opinion

Respondent Public:

Policymakers

Data Source: NCSL

Findings:

- Over ninety percent of the manufacturers who responded believed that vocational education should increase employability skills training (table B.6).

- Almost two-thirds of the state legislators who responded believed that secondary vocational education should increase its efforts in teaching students how to get and hold a job (table B.7).

Table 2 summarizes the findings about employability skills development for each level and by publics.

Occupational Skills Development

Six questions that relate to the issue of the importance of occupational skills development to vocational education students were asked of respondents in the data bases used in this study.

Question 1:

> Please rank the following goals of secondary vocational education programs as to how important you consider each to be. Rank the most important goal as "1", the next most important "2", the next most important "3", the next most important "4", and the least important "5". (Place the number in the blank to the left of the goal.)

____ a. To place students as they leave school in a job related to their training

____ b. To provide the students with competencies needed to obtain a job

____ c. To place students as they leave school in a job not necessarily related to their training

____ d. To create an awareness of the various jobs for which one might prepare

____ e. To provide an opportunity for students to explore various occupational areas

SUMMARY TABLE 2

EMPLOYABILITY SKILLS FINDINGS FOR
EACH LEVEL AND BY PUBLICS

EMPLOYABILITY ISSUES BY LEVEL	Publics: Students	School Personnel	Community Representatives	Policymakers
Benefit of positive work attitude in helping students obtain employment [Table B.1]				
Secondary	Considered beneficial	Considered beneficial	Considered beneficial	***[a]
Postsecondary	Considered beneficial but less so at this level	Considered beneficial	Considered beneficial but less so at this level	***
Benefit of human relations skills in helping student obtain employment [Table B.2]				
Secondary	Considered beneficial	Considered beneficial but less so at this level	Considered beneficial	***
Postsecondary	Considered beneficial but less so at this level	Considered beneficial	Considered beneficial but less so at this level	***

[a]Data not available for this public on this particular issue.

SUMMARY TABLE 2--Continued

EMPLOYABILITY ISSUES BY LEVEL	Students	Publics: School Personnel	Publics: Community Representatives	Publics: Policymakers
Career exploration as a goal of vocational education [Table B.3]				
Secondary	***	Considered important	Considered important	***
Postsecondary	***	Considered important but less so at this level	Considered important but less so at this level	***
Career awareness as a goal of vocational education [Table B.4]				
Secondary	***	Considered important	Considered important	***
Postsecondary	***	Considered important but less so at this level	Considered important but less so at this level	***

SUMMARY TABLE 2--Continued

EMPLOYABILITY ISSUES BY LEVEL	Publics			
	Students	School Personnel	Community Representatives	Policymakers
Emphasis on employability and/or occupational skills by vocational education [Table B.5]				
Secondary	***	***	Both types of skills should be taught	***
Postsecondary	***	***	***	***
Level of effort to be placed on employability skills training [Tables B.6 and B.7]				
Secondary	***	***	Increase effort	Increase effort
Postsecondary	***	***	***	***

Respondent Publics:	Data Sources:
School personnel	Factors--Secondary Factors--Postsecondary
Community representatives	Factors--Secondary Factors--Postsecondary

Findings:

- Three-fifths of the respondent groups at each level identified the provision of competencies needed to obtain a job as the most important goal for vocational education (table C.1).
- Respondents from postsecondary institutions tended to rate this goal slightly higher than did respondents from secondary schools.

Question 2:

In general, how much difficulty does each of the following factors pose for vocational education graduates when they are attempting to obtain jobs?

Students acquired job skills that are too specific

____ Very much difficulty

____ Much difficulty

____ Some difficulty

____ Little difficulty

____ Very little difficulty

Respondent Publics:	Data Sources:
Students	Factors--Secondary Factors--Postsecondary
School personnel	Factors--Secondary Factors--Postsecondary
Community representatives	Factors--Secondary Factors--Postsecondary

Findings:

- All three publics indicated that skills that are too specific pose some difficulty or little difficulty to students (table C.2).
- There was no consensus that the problem is more pervasive at either the secondary or postsecondary level.

Question 3:	Question 4:
Of what help are the following factors for your high school vocational education students in obtaining jobs?	Of what importance are the following factors in your decision to employ a person for an entry-level job?
Occupational skills and competencies	Specific types of occupational skills
____ Very much help	____ Very much importance
____ Much help	____ Much importance
____ Some help	____ Some importance
____ Little help	____ Little importance
____ Very little help	____ Very little importance
Respondent Publics:	Respondent Public:
Students, school personnel	Community representatives
Data Sources:	Data Sources:
Factors--Secondary Factors--Postsecondary	Factors--Secondary Factors--Postsecondary

Findings:

- Three out of every five students and school personnel at both secondary and postsecondary levels indicated that occupational skills and competencies are very much help to students in obtaining jobs (table C.3).
- More than sixty percent of the community representatives indicated that the specific occupational skills

development of secondary students is of much or very much importance in their hiring decisions (table C.3).

- This factor was of much or very much importance to eight of every ten community representatives in hiring decisions involving postsecondary students (table C.3).

Question 5:

In your opinion, how important is it for the schools to provide students with opportunities to learn occupational skills?

____ Very important

____ Important

____ Not too important

____ Not at all important

Respondent Publics:	Data Sources:
School board members	NSBA
General public	NSBA

Findings:

- Both groups strongly support the provision of opportunities to learn occupational skills (table C.4).

Question 6:

How can vocational education be improved? Efforts could be increased in different areas within vocational education. What would you recommend?

Teaching technical and manual job skills at secondary level	Teaching technical and manual job skills at the postsecondary level
_____ Increase effort	____ Increase effort
_____ Maintain current effort	____ Maintain current effort
_____ Decrease effort	____ Decrease effort

Respondent Public:	Data Source:
Policymakers	NCSL

Findings:

- Three-fifths of the state legislators responding to these two questions indicated that there should be increased efforts to teach technical and manual job skills at both the secondary and postsecondary levels (table C.5).

- The remaining two-fifths of the state legislators indicated that secondary and postsecondary vocational education programs should maintain current efforts in teaching technical and manual job skills.

Table 3 summarizes the findings about occupational skills development for each level and by publics.

Work Experience

Three questions on the issue of employability skills were asked of respondents in the data bases used in the study.

Question 1:

> Of what help is the following factor for your high school vocational education students in obtaining jobs?
>
> Previous work experience
>
> ____ Very much help
>
> ____ Much help
>
> ____ Some help
>
> ____ Little help
>
> ____ Very little help

SUMMARY TABLE 3

OCCUPATIONAL SKILLS FINDINGS FOR
EACH LEVEL AND BY PUBLICS

OCCUPATIONAL ISSUES BY LEVEL	Publics			
	Students	School Personnel	Community Representatives	Policymakers
Provision of competencies needed to obtain a job as a goal of vocational education [Table C.1]				
Secondary	***[a]	Considered most important but less so at this level	Considered most important	***
Postsecondary	***	Considered most important	Considered most important	***
Difficulty in finding employment with job skills that are too specific [Table C.2]				
Secondary	Some difficulty	Little difficulty	Some difficulty	***
Postsecondary	Little difficulty	Very little difficulty	Some difficulty	***

[a]Data not available for this public on this particular issue.

SUMMARY TABLE 3--Continued

OCCUPATIONAL ISSUES BY LEVEL	Publics: Students	Publics: School Personnel	Publics: Community Representatives	Publics: Policymakers
Benefit of occcupational skills in helping students find employment [Table C.3]				
Secondary	Considered very beneficial	Considered very beneficial	Important, but not the only component in a decision to hire	***
Postsecondary	Considered very beneficial	Considered very beneficial	Important, but not the only component in a decision to hire	***
Importance of providing students with the opportunity to learn occupational skills [Table C.4]				
Level not specified	***	***	Very important	Very important

SUMMARY TABLE 3--Continued

OCCUPATIONAL ISSUES BY LEVEL	Publics			
	Students	School Personnel	Community Representatives	Policymakers
Recommendations for change regarding occupational skills training [Table C.5]				
Secondary	***	***	***	Increase effort
Postsecondary	***	***	***	Increase effort

Respondent Publics:	Data Sources:
Students	Factors--Secondary Factors--Postsecondary
School personnel	Factors--Secondary Factors--Postsecondary
Community representatives	Factors--Secondary Factors--Postsecondary

Findings:

- Over three-fifths of both groups reported work experience to be of much help or very much help to students in obtaining jobs (table D.1).
- Previous work experience was identified by community representatives as being of some help to secondary and postsecondary students in getting jobs, but was rated as being of slightly more help to secondary students.

Question 2:

[NOTE: In the question previous to this one in the NAM study, respondents were asked to evaluate vocational education by assigning it a grade of A, B, C, D, or Fail.]

If you assign a grade below A (to either high school or community/junior college vocational education) what are the most important things high school and community or junior college vocational education have to do to improve their grade? (Check three in each column.)

	High School	Community/Junior College
Increase the number of different kinds of vocational programs	_____	_____
Update vocational programs	_____	_____
Improve opportunities for minorities	_____	_____

Ensure that individuals who do not go on to college have access to vocational education	____	____
Provide work experience for vocational students	____	____
Actively support economic development in the community	____	____
Improve placement efforts	____	____
Stress teaching of basic skills (reading, writing, and arithmetic)	____	____
Involve employers more in vocational programming	____	____
Increase collaborative retraining efforts	____	____

Respondent Public:	Data Source:
Community representatives	NAM

Findings:

- Nearly two-fifths of the manufacturers believed that work experience for students is a way for secondary and postsecondary education institutions to improve their grade (table D.2).
- In responding to the kind of things that could improve grades for the secondary level, manufacturers included work experience as the fourth most frequently mentioned item; on the other hand, work experience was the most frequently mentioned item to improve the grades of postsecondary institutions.

Question 3:

> Efforts could be increased in different areas within vocational education. What would you recommend in terms of providing work experience as a part of secondary vocational education students' training?

____ Increase effort

____ Maintain current effort

____ Decrease effort

____ No opinion

Respondent Public: Data Source:

Policymakers NCSL

Findings:

- Two-thirds of the state legislators indicated that vocational education should increase its efforts in providing students with work experience, while the remaining one-third indicated that vocational education should maintain current efforts (table D.3).

Table 4 summarizes the findings about work experiences for each level and by publics.

Training-related Placement

One question in the data bases used in this study related to training-related placement.

Question 1:

Please rank the following goals of secondary vocational education programs as to how important you consider each to be. Rank the most important goal as "1", the next most important "2", the next most important "3", the next most important "4", and the least important "5".

____ a. To place students as they leave school in a job related to their training

____ b. To provide the students with competencies needed to obtain a job

____ c. To place students as they leave school in a job not necessarily related to their training

SUMMARY TABLE 4

WORK EXPERIENCE FINDINGS FOR
EACH LEVEL AND BY PUBLICS

WORK EXPERIENCE ISSUES BY LEVEL	Publics			
	Students	School Personnel	Community Representatives	Policymakers
Benefit of work experience in helping students obtain employment [Table D.1]				
Secondary	Considered beneficial	Considered beneficial but less so at this level	Considered somewhat beneficial	***[a]
Postsecondary	Considered beneficial but less so at this level	Considered beneficial	Considered somewhat beneficial	***
Choice of work experience as a means of improving vocational education [Table D.2]				
Secondary	***	***	Not chosen by majority	***
Postsecondary	***	***	Not chosen by majority	***

[a]Data not available for this public on this particular issue.

SUMMARY TABLE 4--Continued

WORK EXPERIENCE ISSUES BY LEVEL	Publics			
	Students	School Personnel	Community Representatives	Policymakers
Recommendations for change regarding work experience [Table D.3]				
Secondary	***	***	***	Increase effort
Postsecondary	***	***	***	***

____ d. To create an awareness of the various jobs for which one might prepare

____ e. To provide an opportunity for students to explore various occupational areas

Respondent Publics:	Data Sources:
School personnel	Factors--Secondary Factors--Postsecondary
Community representatives	Factors--Secondary Factors--Postsecondary

Findings:

- Two-fifths of the secondary school personnel and community representatives responding to this question listed training- related placement as the fourth most important goal for secondary level vocational education (table E.1). The goal of placement not related to training was ranked last.

- When the word "postsecondary" was substituted for "secondary" in this question, one-third of the postsecondary school personnel and community representatives responding indicated that training-related placement is the most important goal for postsecondary vocational education. Another one-third ranked training-related placement as the fourth most important goal for postsecondary vocational education.

- Training-related placement is a more important goal at the postsecondary level than at the secondary level.

Table 5 summarizes the findings about training-related placement for each level and by publics.

Secondary Data Analysis

Tables A.1 through E.1 indicate the responses of the different publics to the nineteen questions selected for analyses purposes. A chi-square statistic was applied to the data in tables A.1 through E.1 to detect differences of opinions between publics and differences of opinions within publics or particular groups comprising the publics. The number of persons in each

SUMMARY TABLE 5

TRAINING-RELATED PLACEMENT FINDINGS
FOR EACH LEVEL AND BY PUBLICS

TRAINING-RELATED PLACEMENT ISSUES BY LEVEL	Publics			
	Students	School Personnel	Community Representatives	Policymakers
Training-related placement as a goal of vocational education [Table E.1]				
Secondary	***[a]	Considered fourth most important out of five	Considered fourth most important out of five	***
Postsecondary	***	Considered second most important out of five	Considered important but less consensus within group	***

[a]Data not available for this public on this particular issue.

respondent group and public was often quite large. This fact contributed to the tendency to find statistically significant differences even where there were small differences in the observed percentages. In fact, most of the analyses did reveal statistically significant differences at the .05 level of probability or better.

The statistical analyses of the data highlighted these five facts:

- Employability skills development is important for all students, but more so at the secondary than at the postsecondary level.
- Occupational skills development is an important role for both secondary and postsecondary vocational education.
- The provision of work experience as a part of vocational education programming is considered important for both secondary and postsecondary vocational education.
- Training-related placement is not seen as a the most important role for secondary or postsecondary vocational education. However, it is considered to be more important at the postsecondary level.
- Basic skills development is an important role at both secondary and postsecondary levels. However, it is considered to be more important to stress basic skills development at the secondary level.

TABLE A.1

BENEFIT OF BASIC SKILLS IN HELPING STUDENTS OBTAIN EMPLOYMENT BY LEVEL AND BY PUBLICS
(Question 1)

Benefit of Basic Skills	Students[a]		School Personnel[b]		Community Representatives[c]	
	Secondary (percent)	Postsecondary (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)
Very much help	72	41	60	64	67	55
Much help	19	28	31	28	27	34
Some help	8	21	8	7	5	11
Little help	1	5	1	1	1	0
Very little help	0	5	0	0	0	0
TOTAL Number	100 [1076]	100 [970]	100 [1607]	100 [744]	100 [276]	100 [309]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary students significant at chi square = 246.95, $p < .001$, df = 4.

[b]Differences between secondary and postsecondary school personnel not significant at chi square = 8.15, $p < .10$, df = 4.

[c]Differences between secondary and postsecondary community representatives significant at chi square = 12.58, $p < .02$, df = 4.

[d]Differences between secondary school personnel and community representatives not significant at chi square = 6.13, $p < .20$, df = 4.

[e]Differences between postsecondary school personnel and community representatives not significant at chi square = 9.46, $p < .10$, df = 4.

TABLE A.2

MANUFACTURERS' ASSESSMENT OF MOST IMPORTANT IMPROVEMENTS TO VOCATIONAL EDUCATION BY LEVEL (Question 2)

Possible Improvements	Level[a] Secondary (percent)	Postsecondary (percent)
Need to stress teaching of basic skills	63	40
Need not mentioned	37	60
TOTAL	100	100
Number	[775]	[775]

SOURCE: Nunez and Russell 1982a.

[a]Differences between secondary and postsecondary significant at chi square = 81.84, $p < .001$, df=1.

TABLE A.3

STATE LEGISLATORS' PERCEPTION OF THE DEGREE TO WHICH VOCATIONAL EDUCATION IMPROVES BASIC SKILLS (Question 3)

Improve Basic Skills	Percentage
Great extent	9
Moderate extent	39
Small extent	49
Not at all	3
TOTAL	100
Number	[90]

SOURCE: Nunez and Russell 1982a.

TABLE A.4

STATE LEGISLATORS' RECOMMENDATIONS FOR CHANGING PROGRAMS TO DEVELOP STUDENTS' BASIC SKILLS (Question 4)

Program Change	Percentage
Increase effort	65
Maintain current effort	34
Decrease effort	1
TOTAL	100
Number	[88]

SOURCE: Nunez and Russell 1982b.

TABLE B.1

BENEFIT OF POSITIVE WORK ATTITUDES IN HELPING STUDENTS OBTAIN EMPLOYMENT BY LEVEL AND BY PUBLICS
(Question 1)

Benefit of Positive Work Attitudes	Students[a]		School Personnel[b]		Community Representatives[c]	
	Secondary (percent)	Postsecondary (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)
Very much help	73	51	71	70	78	64
Much help	22	32	26	27	20	31
Some help	3	13	3	3	2	5
Little help	1	3	0	0	0	0
Very little help	1	1	0	0	0	0
TOTAL Number	100 [1078]	100 [987]	100 [1573]	100 [745]	100 [854]	100 [648]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary students significant at chi square = 136.72, $p < .001$, $df = 4$.

[b]Differences between secondary and postsecondary school personnel not significant at chi square = 1.16, $p < .90$, $df = 4$.

[c]Differences between secondary and postsecondary community representatives significant at chi square = 38.12, $p < .001$, $df = 4$.

[d]Differences between secondary school personnel and community representatives significant at chi square = 15.16, $p < .01$, $df = 4$.

[e]Differences between postsecondary school personnel and community representatives not significant at chi square = 9.01, $p < .10$, $df = 4$.

TABLE B.2

BENEFIT OF HUMAN RELATIONS SKILLS IN HELPING STUDENTS OBTAIN EMPLOYMENT BY LEVEL AND BY PUBLICS
(Question 1)

Benefit of Human Relations Skills	Students[a]		School Personnel[b]		Community Representatives[c]	
	Secondary (percent)	Postsecondary (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)
Very much help	63	45	47	54	51	39
Much help	29	29	39	33	37	42
Some help	6	19	13	12	11	17
Little help	1	5	1	1	1	2
Very little help	1	2	0	0	0	0
TOTAL Number	100 [1079]	100 [969]	100 [1600]	100 [744]	100 [851]	100 [645]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary students significant at chi square = 149.08, $p < .001$, df = 4.

[b]Differences between secondary and postsecondary school personnel significant at chi square = 16.73, $p < .01$, df = 4.

[c]Differences between secondary and postsecondary community representatives significant at chi square = 24.83, $p < .001$, df = 4.

[d]Differences between secondary school personnel and community representatives significant at chi square = 12.00, $p < .02$, df = 4.

[e]Differences between postsecondary school personnel and community representatives significant at chi square = 34.76, $p < .001$, df = 4.

TABLE B.3

RANKING OF GOAL OF VOCATIONAL EDUCATION TO PROVIDE AN OPPORTUNITY FOR STUDENTS TO EXPLORE OCCUPATIONAL AREAS BY LEVEL AND BY PUBLICS
(Question 2)

Rankings	School Personnel[a]		Community Representatives[b]	
	Secondary[c] (percent)	Postsecondary[d] (percent)	Secondary[c] (percent)	Postsecondary[d] (percent)
Most important	17	5	18	9
Second most important	25	15	26	20
Third most important	29	29	28	27
Fourth most important	18	25	21	22
Least important	11	26	7	22
TOTAL Number	100 [1628]	100 [692]	100 [830]	100 [607]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary school personnel significant at chi square = 164.36, $p < .001$, df = 4.

[b]Differences between secondary and postsecondary community representatives significant at chi square = 86.54, $p < .001$, df = 4.

[c]Differences between secondary school personnel and community representatives significant at chi square = 14.44, $p < .01$, df = 4.

[d]Differences between postsecondary school personnel and community representatives significant at chi square = 18.07, $p < .01$, df = 4.

TABLE B.4

RANKING OF GOAL OF VOCATIONAL EDUCATION TO PROVIDE STUDENTS WITH CAREER AWARENESS TO EXPLORE OCCUPATIONAL AREAS BY LEVEL AND BY PUBLICS
(Question 2)

Rankings	School Personnel[a]		Community Representatives[b]	
	Secondary[c] (percent)	Postsecondary[d] (percent)	Secondary[c] (percent)	Postsecondary[d] (percent)
Most important	21	6	24	16
Second most important	34	31	33	31
Third most important	26	34	27	29
Fourth most important	15	22	11	18
Least important	4	7	5	6
TOTAL	100	100	100	100
Number	[1629]	[698]	[828]	[603]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary school personnel significant at chi square = 58.81, $p < .001$, $df = 4$.

[b]Differences between secondary and postsecondary community representatives significant at chi square = 29.01, $p < .001$, $df = 4$.

[c]Differences between secondary school personnel and community representatives significant at chi square = 10.99, $p < .05$, $df = 4$.

[d]Differences between postsecondary school personnel and community representatives significant at chi square = 31.67, $p < .001$, $df = 4$.

TABLE B.5

MANUFACTURERS' VIEWS OF HOW HIGH SCHOOLS
SHOULD PREPARE YOUTH FOR WORK
(Question 3)

Preparation	Percentage
Teach employability and occupational skills	76
Teach employability skills only	16
Teach occupational skills only	8
TOTAL	100
Number	[744]

SOURCE: Nunez and Russell 1982.

TABLE B.6

MANUFACTURERS' VIEWS ABOUT INCREASING EMPLOYABILITY SKILLS TRAINING AT THE HIGH SCHOOL LEVEL
(Question 4)

Manufacturers' Views	Percentage
Agree	93
Undecided	4
Disagree	3
TOTAL	100
Number	[741]

SOURCE: Nunez and Russell 1982a.

TABLE B.7

STATE LEGISLATORS' RECOMMENDATIONS FOR CHANGING PROGRAMS TO TEACH HIGH SCHOOL STUDENTS HOW TO GET AND HOLD A JOB
(Question 5)

Program Change	Percentage
Increase effort	63
Maintain current effort	37
Decrease current effort	0
TOTAL	100
Number	[86]

SOURCE: Nunez and Russell 1982b.

TABLE C.1

RANKING OF GOAL OF VOCATIONAL EDUCATION TO PROVIDE STUDENTS WITH COMPETENCIES NEEDED TO OBTAIN A JOB BY LEVEL AND BY PUBLICS
(Question 1)

Rankings	School Personnel[a]		Community Representatives[b]	
	Secondary[c] (percent)	Postsecondary[d] (percent)	Secondary[c] (percent)	Postsecondary[d] (percent)
Most important	67	81	60	69
Second most important	14	12	16	12
Third most important	16	6	19	17
Fourth most important	2	1	4	1
Least important	1	0	1	1
TOTAL Number	100 [1628]	100 [710]	100 [834]	100 [604]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary school personnel significant at chi square = 60.67, $p < .001$, df = 4.

[b]Differences between secondary and postsecondary community representatives significant at chi square = 19.95, $p < .001$, df = 4.

[c]Differences between secondary school personnel and community representatives significant at chi square = 10.09, $p < .05$, df = 4.

[d]Differences between postsecondary school personnel and community representatives significant at chi square = 45.12, $p < .001$, df = 4.

TABLE C.2

DIFFICULTY OF FINDING EMPLOYMENT FOR STUDENTS WITH JOB SKILLS THAT ARE TOO SPECIFIC BY LEVEL AND BY PUBLICS
(Question 2)

Level of Difficulty	Students[a]		School Personnel[b]		Community Representatives[c]	
	Secondary (percent)	Postsecondary (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)
Very much	7	2	1	1	4	2
Much	19	7	5	3	7	7
Some	42	33	35	28	43	40
Little	22	28	41	30	31	32
Very little	10	30	18	38	15	19
TOTAL	100	100	100	100	100	100
Number	[1042]	[984]	[1557]	[690]	[803]	[595]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary students significant at chi square = 199.92, $p < .001$, df = 4.

[b]Differences between secondary and postsecondary school personnel significant at chi square = 100.92, $p < .001$, df = 4.

[c]Differences between secondary and postsecondary community representatives significant at chi square = 9.52, $p < .05$, df = 4.

[d]Differences between secondary school personnel and community representatives significant at chi square = 58.93, $p < .001$, df = 4.

[e]Differences between postsecondary school personnel and community representatives significant at chi square = 59.79, $p < .001$, df = 4.

TABLE C.3

BENEFIT OF OCCUPATIONAL SKILLS AND COMPETENCIES
IN OBTAINING EMPLOYMENT BY LEVEL AND BY PUBLICS
(Question 3 and 4)

Benefit of Occupational Skills	Students[a]		School Personnel[b]		Community Representatives[c]	
	Secondary (percent)	Postsecondary (percent)	Secondary[e] (percent)	Postsecondary[f] (percent)	Secondary[e] (percent)	Postsecondary[f] (percent)
Very much	66	58	62	80	32[d]	41
Much	27	26	32	19	34	40
Some	5	12	5	1	25	16
Little	1	2	1	0	6	2
Very little	1	2	0	0	3	1
TOTAL	100	100	100	100	100	100
Number	[1076]	[986]	[1606]	[745]	[847]	[646]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary students significant at chi square = 54.28, $p < .001$, df = 4.

[b]Differences between secondary and postsecondary school personnel significant at chi square = 80.52, $p < .001$, df = 4.

[c]Differences between secondary and postsecondary community representatives significant at chi square = 37.06, $p < .001$, df = 4.

[d]Employers' question read: "Of what importance are specific types of occupational skills in your decision to employ a person for an entry level job?"

[e]Differences between postsecondary school personnel and community representatives significant at chi square = 385.19, $p < .001$, df = 4.

[f]Differences between secondary school personnel and community representatives significant at chi square = 247.00, $p < .001$, df = 4.

TABLE C.4

IMPORTANCE OF PROVIDING STUDENTS WITH OPPORTUNITIES TO LEARN OCCUPATIONAL SKILLS BY RESPONDENT GROUP (Question 5)

Importance	Respondent Group	
	School Board Members (percent)	Public (percent)
Very important	58	87
Important/somewhat important[a]	37	12
Not too important	5	1
Not important at all	0	0
TOTAL	100	100
Number	[812]	[4128]

SOURCE: Lewis, McElwain, and Fornash 1980.

[a]Category "important" used only on school board survey, "somewhat important" used only on public opinion survey.

TABLE C.5

STATE LEGISLATORS' RECOMMENDATIONS FOR CHANGING PROGRAMS THAT TEACH TECHNICAL AND MANUAL JOB SKILLS BY LEVEL (Question 6)

Program Change	Level[a]	
	Secondary (percent)	Postsecondary (percent)
Increase effort	58	58
Maintain current effort	41	40
Decrease effort	1	2
TOTAL	100	100
Number	[89]	[87]

SOURCE: Nunez and Russell 1982b.

[a]Differences between secondary and postsecondary recommendations not significant at chi square = .19, $p < .95$, df=2.

TABLE D.1

BENEFIT OF WORK EXPERIENCE IN HELPING STUDENTS OBTAIN EMPLOYMENT BY LEVEL AND BY PUBLICS
(Question 1)

Benefit of Work Experience	Students[a]		School Personnel[b]		Community Representatives[c]	
	Secondary (percent)	Postsecondary (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)	Secondary[d] (percent)	Postsecondary[e] (percent)
Very much help	40	37	24	37	13	7
Much help	36	23	38	35	27	31
Some help	21	22	34	24	42	50
Little help	2	8	3	3	13	10
Very little help	1	10	1	1	5	2
TOTAL	100	100	100	100	100	100
Number	[1072]	[965]	[1598]	[733]	[852]	[611]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary students significant at chi square = 138.34, $p < .001$, df = 4.

[b]Differences between secondary and postsecondary school personnel significant at chi square = 43.08, $p < .001$, df = 4.

[c]Differences between secondary and postsecondary community representatives significant at chi square = 29.55, $p < .001$, df = 4.

[d]Differences between secondary school personnel and community representatives significant at chi square = 178.87, $p < .001$, df = 4.

[e]Differences between postsecondary school personnel and community representatives significant at chi square = 217.14, $p < .001$, df = 4.

TABLE D.2

MANUFACTURERS' ASSESSMENT OF MOST IMPORTANT IMPROVEMENTS TO VOCATIONAL EDUCATION BY LEVEL (Question 2)

Possible Improvements	Level[a] Secondary (percent)	Postsecondary (percent)
Need to provide work experience	38	43
Need not mentioned	62	57
TOTAL	100	100
Number	[775]	[775]

SOURCE: Nunez and Russell 1982a.

[a]Differences between secondary and postsecondary not significant at chi square = 4.28, $p < .50$, df=4.

TABLE D.3

STATE LEGISLATORS' RECOMMENDATIONS FOR CHANGING PROGRAMS TO PROVIDE HIGH SCHOOL STUDENTS WITH WORK EXPERIENCE (Question 3)

Program Change	Percentage
Increase effort	65
Maintain current effort	34
Decrease effort	1
TOTAL	100
Number	[88]

SOURCE: Nunez and Russell 1982b.

TABLE E.1

RANKING OF GOAL OF VOCATIONAL EDUCATION TO PLACE STUDENTS
IN TRAINING-RELATED JOBS AFTER HIGH SCHOOL BY LEVEL AND BY PUBLICS
(Question 1)

Rankings	School Personnel[a]		Community Representatives[b]	
	Secondary[c] (percent)	Postsecondary[d] (percent)	Secondary[c] (percent)	Postsecondary[d] (percent)
Most important	14	9	15	7
Second most important	25	42	22	35
Third most important	13	13	15	14
Fourth most important	42	30	43	41
Least important	6	6	5	3
TOTAL	100	100	100	100
Number	[1622]	[697]	[829]	[600]

SOURCE: McKinney et al. 1981, 1982.

[a]Differences between secondary and postsecondary school personnel significant at chi square = 76.88, $p < .001$, df = 4.

[b]Differences between secondary and postsecondary community representatives significant at chi square = 42.83, $p < .001$, df = 4.

[c]Differences between secondary school personnel and community representatives not significant at chi square = 2.48, $p < .70$, df = 4.

[d]Differences between postsecondary school personnel and community representatives significant at chi square = 22.55, $p < .001$, df = 4.

CHAPTER 3

IMPLICATIONS FOR LEGISLATION, PLANNING, AND POLICY

An assessment of opinions about the roles of secondary and postsecondary vocational education from various groups that comprise the public at large is currently needed because of the increased competition for federal, state, and local funds. Funding, planning, and policy decisions about vocational education require an understanding of the vocational education roles that the public at large desires to support.

A secondary analysis of the results of five completed National Center studies was undertaken to examine the opinions of different groups about roles for secondary and postsecondary vocational education in preparing persons for employment. The groups included in the secondary analysis were those who support vocational education, those who benefit from it, and those who are part of the educational process.

The secondary analysis involved an examination of the opinions of present and former students; teachers, counselors, and school administrators; employers; local vocational education advisory council members; school board members; and state legislators. The different groups were combined for analytical purposes into four publics: (1) students, (2) school personnel, (3) community representatives, and (4) policymakers.

The public believes that the development of employability, occupational, and basic skills; the provision of work experiences; and placement efforts by vocational education providers are all desirable roles for vocational education. Unfortunately, the findings derived from the secondary analyses process do not tell us which of these roles for vocational education the public would support under different funding or employment conditions. Also, the findings do not provide an understanding of how much the public values one role over another, or whether other roles would be equally or more highly valued and supported.

What then can the findings derived from the secondary analysis process imply for vocational education policy and planning? The findings suggest that Congress should consider the following--

- Re-examining the importance given to training-related placement in the Education Amendments of 1976 as a basis for assessing the success of vocational education programs. Study findings indicate that the public at large values other roles for vocational education higher than they value training-related placement.

- Re-examining the need to continue legislative set-asides and deciding if states and local agencies should determine the allocation of federal vocational education funds among providers. The public at large believes that secondary and postsecondary vocational education have similar roles in preparing persons for employment. In addition, decisions about where to fund vocational education (both geographically and by level) depend on student interest in obtaining training, local employment needs, and the availability of facilities and instructional programs.

- Examining what the federal role should be in promoting basic skills development. The public at large believes that basic skills development is both an appropriate role for vocational education institutions and a need for vocational education students. The federal government has a vested interest in ensuring that the nation has a highly trained and skilled work force. Such a work force cannot exist unless appropriate attention is given to basic skills development in educational institutions. Such an examination by the Congress should focus on what the national policy toward basic skills education should be, and how federal legislation can influence implementation of the policy by states and local education providers.

The U.S. Department of Education should consider the following:

- Responding to the need for more adequate data to gauge public sentiment about roles of secondary and postsecondary education by funding additional research studies.

- Formulating national priorities for the use of federal funds for vocational education improvements in the states. The public at large supports implementing occupational, employability, and basic skills training that is of high quality; developing work experience programs; and encouraging job placement programs at the local level. Since federal funds for improving vocational education are not unlimited and program improvements are likely to differ with respect to their costs and their impacts, priorities for funding program improvements are important.

State boards and agencies for vocational education should consider:

- Conducting research to determine what roles for secondary and postsecondary vocational education are supported by the public at large, and formulating statewide priorities for the use of federal and state funds for vocational education improvements on the basis of such research. Such priorities should consider federal progam improvement priorities and the needs of local providers within the state.

- Working with other state educational boards and agencies to formulate policies and plans that will ensure that vocational education students will have the basic educational skills they need to function as effective workers in an increasingly technological labor market and to be able to make career changes if and when necessary or desired. The findings of this study shed no light on who should be responsible for providing basic educational skills and at what levels.

APPENDIX A

DESCRIPTION OF THE DATA BASES USED IN THE SECONDARY ANALYSIS

1. Attitudes toward Vocational Education and the Relationship Between Family Income and Participation in Vocational Courses, Lewis, McElwain, and Fornash 1980.

This study is the result of the analysis of data from a national opinion survey of adults (Caravan) and from a survey of members of the National School Board Association (NSBA) focusing on attitudes toward vocational education. Both surveys were conducted in 1979. The first survey (Caravan) included a total of 4,137 adults eighteen-years-old and over as of January 1979. The second survey (NSBA) included 830 NSBA members and was conducted at the NSBA national convention. Information that was collected on educational history and family income of respondents was analyzed to determine if there was a relationship between participation in vocational training and family income.

2. Factors Relating to the Job Placement of Former Postsecondary Vocational-Technical Education Students, McKinney et al. 1982.

The purpose of this study was threefold: (1) to identify factors that influence job placement for postsecondary vocational students; (2) to describe educational and community processes that appear to influence placement; and (3) to generate hypotheses concerning factors related to postsecondary vocational students' placements in jobs related to their training. The data used in the secondary analysis were from 2,599 mail questionnaires representing eight respondent groups in thirty-one postsecondary institutions in four states. Respondent groups were chosen to reflect three issue areas: education, labor market, and the community. The actual groups surveyed were:

Advisory committee members

Current vocational-technical education students

Deans/Directors of postsecondary vocational-technical education schools

Former vocational-technical education students

Guidance counselors

Job placement specialists

School principals

vocational-technical teachers

3. Factors Relating to the Job Placement of Former Secondary Vocational Educational Students, McKinney et al. 1981.

The purpose of this study was threefold: (1) to identify factors that influence job placement for secondary vocational students; (2) to describe educational and community processes that appear to influence placement; and (3) to generate hypotheses concerning factors related to secondary vocational students' placements in jobs related to their training. The data used in the secondary analysis were from 5,062 mail questionnaires representing ten respondent groups in sixty-two local education agencies in seven states. Respondent groups were chosen to reflect three issue areas: education, labor market, and the community. The actual groups surveyed were these:

Advisory council members
Current vocational education students
Directors of local vocational education schools
Employers
Former vocational education students
Guidance counselors
Job placement specialists
Parents
School principals
Vocational teachers

4. A Survey of the National Association of Manufacturers, Nunez and Russell 1982.

A survey of manufacturers was conducted by the National Association of Manufacturers (NAM) with the technical assistance of the National Center for Research in Vocational Education during July and August 1981. The objective of the survey was to elicit the views of NAM members about vocational education, particularly regarding the effectiveness of vocational education, collaborative activities between manufacturers and vocational education, and manufacturers' suggestions for the improvement of vocational education. Two thousand NAM members were randomly selected for the survey, representing firms of various size, geographic regions, and products/activities. Almost forty percent of the sample responded to the survey (775 respondents). Of the respondents, almost 40 percent were presidents or chief executive officers of their firms.

5. A Survey of the National Conference of State Legislatures, Nunez and Russell, 1982.

A survey of state legislators was conducted by the National Conference of State Legislatures (NCSL) with the technical assistance of the National Center for Research in Vocational Education during the fall of 1981. The purpose of the study was to determine state legislators' views about vocational education and its outcomes, what it should be doing, how it could be improved, and the roles that federal and state agencies should play. Two hundred and nine NCSL members were selected to participate in the mail survey, including 109 members and alternates of the NCSL Education Committee and 99 legislators randomly selected from among NCSL committee members at large. Approximately 45 percent of the sample responded to the survey.

REFERENCES

Fraser, Jeannette L.; Orth, Mollie N.; and Lewis, Morgan V. The Training and Experience of State Staff in Vocational Education: Implications for the Implementation of Federal Policies. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

Lewis, Morgan V., and Fraser, Jeannette L. Increasing Community Involvement in Cooperative Vocational Education. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

Lewis, Morgan V.; Fraser, Jeannette L.; Russell, Jill Frymier; and Orth, Mollie N. Examining Secondary Vocational Programs with High and Low Training-Related Placement. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

Lewis, Morgan V.; McElwain, Douglas C.; and Fornash, Patricia G. Attitudes toward Vocational Education and the Relationship between Family Income and Participation in Vocational Courses. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

McKinney, Floyd L.: Franchak, Stephen J., Halasz, Ida M.; Morrison, Irene; and Fornash, Patricia. Factors Relating to the Job Placement of Former Postsecondary Vocational-Technical Education Students. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

McKinney, Floyd L.; Franchak, Stephen J.; Halasz-Salster, Ida; Morrison, Irene; and McElwain, Douglas. Factors Relating to the Job Placement of Former Secondary Vocational Education Students. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.

Nunez, Ann R., and Russell, Jill Frymier. A Survey of the National Association of Manufacturers (Book 1). Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982a.

Nunez, Ann R., and Russell, Jill Frymier. A Survey of the National Conference of State Legislatures (Book 2). Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982b.

Starr, Harold; Maurice, Clyde; Merz, Harold; and Zahniser, Gale. Coordination in Vocational Education Planning: Barriers and Facilitators. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

Starr, Harold; Merz, Harold; Thrane, Lucille C.; Jahnke, Jessica J.; and Cohen, Stanley. Conditions Affecting Vocational Education Planning. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1981.

Starr, Harold. Vocational Education's Response to Skilled Industrial Worker Shortages. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1980.

VocEd. Journal of the American Vocational Association 57, no. 6 (September 1982): complete issue.